

growths when they are nourished by the branches of the external carotids.

5. Ligature of one or both of the external carotids for the cure of aneurismal formations of the branches of the same is not feasible as an independent curative measure.

6. Ligature of the common carotid should not be done for the cure or for the arrest of morbid conditions involving the external carotid or its branches, except as a final resort.

REPORT OF OPERATION FOR REMOVAL
OF COLOSSAL CYSTIC TUMOR OF
LOWER JAW.

By W. B. ROGERS, M. D.,

OF MEMPHIS.

PROFESSOR OF PRINCIPLES AND PRACTICE OF SURGERY IN MEMPHIS HOSPITAL
MEDICAL COLLEGE.

AS long ago as 1871, before I even contemplated making medicine my profession, I recall the visits of Henry Macklin, to my father's office, and, that there I saw my father open a cyst about the center of the alveolar process of the lower jaw, and at intervals of several days, inject the cavity with tr. iodine. Macklin continued under treatment several months, but declined to allow any operation further than that named above. The cyst at time of first opening contained a mucilaginous fluid to the amount of about half an ounce. It seems that he sought no further advice concerning the growth, until about the first of February, 1886, when he called on me. The accompanying cut gives his appearance. His age is forty years; has resided in Memphis for twenty odd years; general health always good; occupation, teamster. Within the past six or eight months has lost flesh, owing to inability to take sufficient nourishment. Diet: Liquids and finely-cut meats. Teeth of lower jaw nearly all out, and the remaining few so diverged from the normal line that they cannot touch the upper teeth, and in fact, no effort at mastication can be made,

owing to size of lower jaw. The growth is clearly of cystic nature—elastic and even, fluctuating points easily detected, with bony masses between; crackling sensation felt on manipulation. The tumor, after nearly filling the buccal cavity, grew forward and outward; grew out of the mouth, the under lip being pressed down, and scantily covering the lower surface of the mass, which occupied the entire body of the bone, from angle to angle. A few straggling teeth peeped up here and there; the mucous membrane thinned and ulcerating at many points, gave a very bad odor to the tumor. There was no glandular enlargement; articulation very indistinct. The growth of tumor had been gradual and painless. Circumference from chin to lambdo-parietal junction was 42 inches. Several cysts on upper aspect were punctured, emitting white-of-egg-like fluids. The diagnosis was in accordance, cystic disease of lower jaw. Operative interference was clearly justifiable, and the patient anxious for the step.

On February 26, 1886, assisted by Drs. D. D. Saunders, S. A. Rogers, Ashe, Dorey, Haywood and Graves, I operated. With the patient fully anæsthetized, and lying on the left side, I first passed a stout ligature through tip of the tongue, to secure it against falling back and choking him, when the genial muscles were severed. An incision was then made along the anterior aspect from side to side, at the line of junction of the labial mucous membrane, with that covering the tumor. This incision was $8\frac{1}{2}$ inches in length, and freed the lower lip, which was then carried down and backwards, and the tumor "delivered," so to speak. Keeping the knife well against the bone, I detached the masseter muscle on each side, and with Hey's saw cut through the rami. The right ramus was in fair condition of soundness, but the left was cystic nearly half way up. The next step was to sever the attachments of the int. pterygoid, mylo-hyoid, digastric and genial muscles, during which great pains were taken to keep the edge of the knife against the bone. The tumor being fully separated and removed, I found the sublingual artery alone requiring ligation; quite a number of veins poured forth their contents, but on the whole not more than six ounces of blood escaped. The tongue showed a marked tendency to fall back and choke the patient, but was under ready control by means of the ligature in its apex. The points on the rami were rounded with forceps; the buccal cavity thoroughly cleansed with carbolized solution; a broad bandage was carried sling-

like around the head, to support the super-abundance of lower lip; an attendant placed in charge of the cord holding the tongue, and the patient put to bed. The pulse gave no evidence of depression; he soon came from under the anæsthetic, and three hours later I found him in excellent condition.

Time occupied in the operation was forty minutes, including time of administering ether.



FIG 1. CYSTIC TUMOR OF LOWER JAW.

The temperature reached 100° on the second day after the operation, but subsided of its own accord on the third day. His food consisting of milk and broth, was taken through a tube. For the first two days a constant watch was necessary to prevent the tongue falling back and choking him, but from the third day on he was able to control this tendency of the tongue, and the cord was removed.

The fourth day found him improving and propped up in bed; the discharge was not abundant nor offensive. Antiseptic washes were used every two or three hours, and he continued to do well until the

seventh day after the operation, when it was with much persuasion I kept him from getting up and dressing himself. The wound was contracting and healing nicely, its edges healthy; the pus was "laudable."

On the fifth day he was able to sit up, and was feeling quite himself, as he expressed it. I did not see him that day, but learned late that night he had a little fever. I ordered quinine to be taken during the night, but it was not retained; called at 9 o'clock the next morning; he had just had a chill—nose and ears still cool—pulse feeble. I ordered stimulants and warm applications. At 11 o'clock his temperature was 104° ; pupils dilated; breathing labored; patient stupid; at 12 o'clock he died. His death was due to congestion, such as is not unfrequently seen to follow a chill in this climate. Upon questioning his wife, I learned that two weeks prior to his death he had a chill, but took quinine, which kept off the next paroxysm.

The tumor is now in the museum of the Memphis Hospital Medical College, weighs $7\frac{1}{4}$ pounds; transverse diameter, $9\frac{1}{2}$ inches; ante.-post. thickness in median line, $7\frac{3}{4}$ inches; depth at median line, $7\frac{3}{4}$ inches.

A section of the mass shows it to be made up of cavities separated by bony walls, lined by serous membrane; these cavities vary from one-fourth inch to one and one-half inch in diameter; contents vary from white-of-egg, straw, brown to sanguineous color. The make-up of this tumor is most accurately given by Gross, under the head of "Cysts of Lower Jaw, belonging to what might be termed compound cysts.